

of the original description recognized that, "This little plant appears to be intermediate between the genus *Hepatica*, which has a sessile flower and the *Anemonanthea* section of *Anemone*, which has divided involucre leaves and muticous achenia." (3)

The distinguishing characters of these species are:

- Flowers projected above the involucre on a short pedicel (about 8 mm. long).....*H. Falconeri*
 Flowers sessile on and closely subtended by the involucre.
 Leaves deeply cleft (to the middle or beyond), 5-8 cm. in diameter, rather coarse in texture; mature petioles 8-20 cm. long, sparsely appressed-pubescent: flowers 3-4 cm. in diameter.....*H. transsylvanica*
 Leaves shallowly lobed (not more than $\frac{1}{3}$ of way to base), 3-5 cm. in diameter, thinner in texture; mature petioles 5-10 cm. long, shaggy-villous: flowers 1-2 cm. in diameter, yellow (from description).....*H. Henryi*

REFERENCES.

- (1) Hooker's *Icones Plantarum* xvi. t. 1570. (1887.)
 - (2) *Verhandlungen und Mittheilungen des Siebenbürgischen Vereins für Naturwissenschaften zu Hermannstadt* i. 83. (1850.)
 - (3) Hooker's *Icones Plantarum* ix. t. 899. (1852.)
 - (4) *Bulletin de la Société Botanique de France* li. 66. (1904.)
 - (5) Engler's *Botanische Jahrbücher* xxxvii. 190, 271-272. (1905.)
- GRAY HERBARIUM.

INTERESTING PLANTS OF NORTHERN LABRADOR.

R. H. WOODWORTH.

A SCIENTIFIC expedition, planned and commanded by Columbus O'D. Iselin, spent the summer of 1926 working in the region of northernmost Labrador. The expedition was mainly one of oceanography. The writer was most fortunate to be invited to join the party in order to collect plants for the Gray Herbarium whenever the opportunity presented itself. Difficulties in drying specimens were met with on account of the usual dampness of a sailing vessel together with an unusually damp season. The use of flaked naphthalene sprinkled upon the specimens before they were packed away was a decided aid in drying. Collections were made from fourteen stations, four of which are in the vicinity of regions of previous collections.

The plants have been identified at the Gray Herbarium, Harvard

University, under the direction of Prof. M. L. Fernald. In general they have appeared to be typical arctic plants, which have heretofore been brought back from Labrador. Some of the species, however, are worthy of note.

DUPONTIA MICRANTHA Holm. On gravelly sea beaches; Ryan's Bay and Ekortarsuk Bay.

Originally described from northern Labrador and shores of Hudson Bay. The species is apparently of wide arctic range, since material from Spitzbergen (*T. M. Fries*, August, 1868) belongs here rather than with *D. psilosantha*, with which it was originally identified.

TRisetum SPICATUM (L.) Richter. On alluvial terraces; Ryan's Bay.

First collection from south of Ellesmereland of the typical arctic and Eurasian plant. When Fernald revised the eastern American variations of the species¹ he stated that this typical form with very dense violet or bronze obovoid panicle was unknown in America south of the Arctic.

T. SPICATUM, var. *MAIDENII* (Gandoger) Fernald. On alluvial terraces; Sandwich Bay, Saglek Bay, Nachvak Bay, Ryan's Bay, Ekortarsuk Bay.

T. SPICATUM var. *PILOSIGLUME* Fernald. On alluvial terraces; Nachvak Bay. This and the preceding variety were already known from Labrador.

DESCHAMPSIA ALPINA (L.) R. & S. On sandy river bank; Ryan's Bay. An arctic-alpine species of Eurasia, already known from Greenland but not previously from North America.

KOBRESIA BELLARDII (All.) Degland. On granitic hillsides; Nachvak Bay and Ryan's Bay. An arctic-alpine species not previously known in eastern America from south of Ellesmereland.

CAREX BIPARTITA All. On alluvial terraces; Ryan's Bay. Not definitely recorded from Labrador but collected by Sornborger at Rama (no. 256) and distributed as *C. glareosa* Wahlenb.

C. TRISPERMA Dewey. In sphagnum bog; Sandwich Bay. A slight extension to the northeast; the species already known from along the Straits of Belle Isle.

C. HALLERI Gunn. On alluvial terraces; Ryan's Bay. Heretofore known in Labrador only from the Straits of Belle Isle (Blanc Sablon, *Fernald & Wiegand*, no. 2852).

¹ Fernald, *The Representatives of Trisetum spicatum in eastern America*. RHODORA, xviii. 195-198 (1916).

JUNCUS BIGLUMIS L. On rocky hillside; Ekortarsuk Bay. First collection from south of Baffinland.

J. BREVICAUDATUS (Engelm.) Fernald. On sandy river bank; Sandwich Bay. A slight extension to the northeast, from the Straits of Belle Isle.

LUZULA CAMPESTRIS, var. *ALPINA* Gaud. On rocky hillside; Ekortarsuk Bay. Heretofore known in North America only from the northwest shore of Hudson Bay and from the Shickskock Mts. of Quebec.

IRIS VERSICOLOR L. On sandy river bank; Sandwich Bay. A slight extension northeastward from the Straits of Belle Isle.

SALIX ANGLORUM Cham., var. *KOPHOPHYLLA* Schneider. On rocky hillsides; Saglek Bay, Nachvak Bay. New to Labrador. Previously known only from Newfoundland and eastern Quebec.

S. BEBBIANA Sarg., var. *PERROSTRATA* (Rydb.) Schneider. On rocky river bank; Sandwich Bay. Northeastern extension from northern Newfoundland and Saguenay Co., Quebec.

BETULA PAPYRIFERA Marsh., var. *CORDIFOLIA* (Regel) Fernald. On sandy alluvial bank; Sandwich Bay. Northeastern extension from northern Newfoundland and Saguenay Co., Quebec. The trees had cherry-red bark.

COCHLEARIA GROENLANDICA L., var. *OBLONGIFOLIA* (DC.) Lange. On gravelly alluvial terraces; Saglek Bay and Ryan's Bay. The material from northern Labrador is a good match for authentic Greenland specimens.

SAXIFRAGA GASPENSIS Fernald. On rocky hillside; Nachvak Bay. This species has heretofore been known only from the Shickshock Mts. of the Gaspé Peninsula, Quebec.

ANTENNARIA PYGMAEA Fernald. On rocky hillsides; Nachvak Bay and Ryan's Bay. Specimens larger than previous collections, reaching a full decimeter in height; occasionally with 2-3 heads.

A. SORNBORGERI Fernald. On rocky hillsides; Ryan's Bay and Ekortarsuk Bay. Previously known only from Rama. The species strongly contrasting in the field with the common *A. alpina* on account of its rigid habit.

A. ISOLEPIS Greene. On damp rocky hillsides; Nachvak Bay and Ryan's Bay. The involucre tend to be greenish rather than white, as in earlier collections. The species is quickly recognized in the field on account of its flaccid flowering stems.

PETASITES TRIGONOPHYLLA Greene. River-delta; Nachvak Bay. New to Labrador. Heretofore known in eastern America only on the Shickshock Mts. of the Gaspé Peninsula and on Anticosti Island.

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EFFECTS OF POST-PLEISTOCENE MARINE SUBMERGENCE IN EASTERN NORTH AMERICA.

H. K. SVENSON.

(Continued from p. 48.)

CANADA.—In New Brunswick, Chalmers¹ shows the presence of marine deposits across the isthmus of Chignecto, throughout the valley of the Kennebecasis River, and extensively along the Mirimichi River. The deposits are confined to the coastal areas and river estuaries. In the upper St. John Valley, the terraces and clays are of lacustrine origin. "In the region along the south side of the St. Lawrence, below Rivière du Loup, there has been a subsidence of from 345 to 375 feet with reference to the present sea level in the Post-tertiary period. Above the 375 feet contour line, no evidence of submergence was seen."²

Johnston³ finds it impracticable definitely to trace the northern boundary of the Champlain Sea at its maximum height in the Ottawa valley because of weakness of development of the highest shore-line and because of the character of the rocky upland area, but shows that, in general, the northern boundary lay along the face of the Laurentian Plateau escarpment, roughly parallel to the Ottawa River. The sea extended far up the Ottawa valley, possibly as far as the head of Lake Temiskaming. "The southwestern margin of the sea has not been traced, but it is known from the altitudes of the raised beaches and from the distribution of the marine sediments that it was bounded, approximately, by the eastern border of the Pre-Cambrian upland area in south-central Ontario. At the highest stage of marine submergence, the portion of the triangular area between the Ottawa and St. Lawrence rivers, lying east of a line

¹ See Surface-geology maps accompanying Canadian Geol. Surv., 1885 to 1888, also Ann. Rept. 1885: 40 gg.

² Can. Geol. Surv. Ann. Rept. 1886: 8M.

³ Johnston, W. A. Late Pleistocene Oscillations of Sea-Level in the Ottawa Valley. Can. Dept. of Mines. Mus. Bull. 24: 1916.